

1 **DIRECT TESTIMONY**

2 **OF**

3 **E. ELIZABETH BEST**

4 **ON BEHALF OF**

5 **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

6 **DOCKET NO. 2008-196-E**

7
8 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

9 A. My name is E. Elizabeth Best and my business address is 1426 Main
10 Street, Columbia, South Carolina.

11
12 **Q. WHERE ARE YOU EMPLOYED AND WHAT IS YOUR POSITION**
13 **THERE?**

14 A. I am employed by SCANA Services, Inc., a subsidiary of SCANA
15 Corporation, in Columbia, South Carolina and I am the Director of Financial
16 Planning and Investor Relations.

17
18 **Q. HOW LONG HAVE YOU BEEN EMPLOYED WITH SCANA**
19 **SERVICES?**

20 A. I started working there in January 2002, so I have been employed with
21 SCANA Services for over six years.

1 **Q. WHAT WAS YOUR EMPLOYMENT HISTORY PRIOR TO JOINING**
2 **SCANA SERVICES?**

3 A. I was employed for nine years by Union Switch & Signal, Inc., a
4 railway signaling and automation company headquartered in Pittsburgh,
5 Pennsylvania, with responsibilities expanding from a divisional financial
6 planner to the Director of Financial Reporting for a then \$350 million publicly
7 traded company on the NASDAQ. Prior to that, I was employed in the public
8 accounting firm Coopers & Lybrand, now PriceWaterhouseCoopers, working
9 on a variety of audit clients including utilities, health care, manufacturing, non-
10 profit, and governmental entities.

11

12 **Q. WHAT EDUCATIONAL DEGREES AND PROFESSIONAL**
13 **CERTIFICATIONS DO YOU HOLD?**

14 A. I am a graduate of Clemson University with a Bachelor of Science
15 Degree in Financial Management. I also hold a Master of Business
16 Administration from the University of South Carolina. Since 1991, I have been
17 a Certified Public Accountant in South Carolina.

18

19 **Q. WHAT ARE YOUR DUTIES WITH SCANA SERVICES?**

20 A. I am responsible for financial planning matters, which involve
21 development of the Company's financial plans, preparation of valuations for
22 existing and potential businesses, and support in the development and

1 execution of financial strategies for all of SCANA's subsidiaries. I also am
2 responsible for investor relations issues, which involve developing, verifying,
3 and communicating actual and projected financial and operational information
4 about the Company to various segments of the financial community and to
5 current and potential investors. I also am responsible for assuring that all
6 information released by the Company is consistent, accurate, and timely and
7 meets all applicable SEC, NYSE, and Company disclosure guidelines.

8
9 **Q. ARE YOU FAMILIAR WITH THE COMBINED APPLICATION FOR**
10 **CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY, PUBLIC**
11 **CONVENIENCE AND NECESSITY, AND FOR A BASE LOAD**
12 **REVIEW ORDER PREPARED BY SCE&G WITH RESPECT TO**
13 **PUBLIC SERVICE COMMISSION DOCKET NUMBER 2008-196-E?**

14 A. Yes.

15
16 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY IN**
17 **REGARD TO THAT APPLICATION?**

18 A. The purpose of my testimony is to explain the financial and cost
19 projections related to the construction program, including contingency amounts
20 and inflation indices included in those projections. I also will be testifying in
21 regard to the calculation of SCE&G's weighted average cost of capital. I also
22 will explain in my testimony the calculation of SCE&G's revenue

1 requirements based upon the anticipated capital expenditures, as well as the
2 expected In-Service Expenses arising during the 12 months following the
3 anticipated start-up dates of Units 2 and 3. As part of my testimony, I am
4 sponsoring the following Exhibits to the Public Service Commission of South
5 Carolina (“Commission”):

6 **Exhibit F (Public) (Exhibit No. ____ (EEB-1-P)),** Anticipated
7 Components of Capital Costs and Schedule, which is also Exhibit
8 F, Public Version, to the Combined Application;

9 **Exhibit F (Confidential) (Exhibit No. ____ (EEB-1-C)),** Anticipated
10 Components of Capital Costs and Schedule, which is also Exhibit
11 F, Confidential Version, to the Combined Application;

12 **Exhibit I (Public) (Exhibit No. ____ (EEB-2-P)),** Inflation Indices and
13 Contingency Factors, which is also Exhibit I, Public Version, to
14 the Combined Application;

15 **Exhibit I (Confidential) (Exhibit No. ____ (EEB-2-C)),** Inflation
16 Indices and Contingency Factors, which is also Exhibit I,
17 Confidential Version, to the Combined Application;

18 **Exhibit L (Exhibit No. ____ (EEB-3)),** Cost of Debt and Capitalization
19 Ratios, which is also Exhibit L to the Combined Application;

20 **Exhibit M (Exhibit No. ____ (EEB-4)),** Year-by-Year Revenue
21 Requirements and Projected Rate Impact of Investment, which is
22 also Exhibit M to the Combined Application; and

1 **Exhibit O (Exhibit No. ____ (EEB-5)), In-Service Expenses, which is**
2 also Exhibit O to the Combined Application.

3 In addition, I will be presenting a document that is not included in the
4 Combined Application but that summarizes SCE&G's analysis with respect to
5 certain tax credits to which SCE&G may be entitled after it places Units 2 and
6 3 into service. This document is attached as **Exhibit No. ____ (EEB-6).**

7

8 **Q. ARE YOU FAMILIAR WITH EXHIBITS F, I, L, M, AND O TO THE**
9 **COMBINED APPLICATION AND THE INFORMATION AND DATA**
10 **USED TO PREPARE THOSE EXHIBITS?**

11 A. Yes.

12

13 **Q. DOES THE INFORMATION CONTAINED IN THESE EXHIBITS**
14 **REFLECT THE REASONABLE ESTIMATE OF THE IDENTIFIED**
15 **COSTS TO CONSTRUCT AND PLACE INTO SERVICE UNITS 2 AND**
16 **3?**

17 A. Yes. These estimates are based upon reasonable and accurate
18 information and projections available at the time the Combined Application
19 was filed and are appropriate information upon which to base an Order in this
20 proceeding. There will, however, be variations from year to year based upon
21 the timing of expenditures and other factors.

22

1 **Q. PLEASE EXPLAIN THE ANTICIPATED COMPONENTS OF**
2 **CAPITAL COSTS AND THE SCHEDULE FOR INCURRING THOSE**
3 **COSTS AS SET FORTH IN EXHIBIT F (PUBLIC).**

4 A. This information is set forth in Chart A of **Exhibit F (Public)**, Page 3 of
5 3. This schedule sets forth the anticipated components of capital cost and the
6 forecasted schedule for incurring these costs as used by SCE&G in projecting
7 the cash flows, construction work-in-progress (“CWIP”) balances, and other
8 financial matters related to SCE&G’s share of the cost for constructing two
9 Westinghouse AP1000 units at V.C. Summer Nuclear Station Units 2 and 3.

10

11 **Q. IS SCE&G CONTRACTUALLY OBLIGATED TO MAINTAIN**
12 **CERTAIN INFORMATION CONFIDENTIAL?**

13 A. Yes. SCE&G seeks to maintain as confidential certain information
14 related to the Engineering, Procurement and Construction Contract (“EPC
15 Contract”) because Westinghouse Electric Co., LLC (“Westinghouse”) and
16 Stone & Webster, Inc. (“Stone & Webster”) (collectively,
17 “Westinghouse/Stone & Webster”) consider this information to be proprietary
18 information in the nature of a trade secret. Thus, Westinghouse/Stone &
19 Webster has taken steps to maintain this information as confidential and
20 believes that the public release of this information could injure it in
21 negotiations for the sale of other units. Westinghouse/Stone & Webster also
22 believes that, if released to the public, this data would allow competitors to

1 calculate specific prices being charged under the EPC Contract, both in
2 aggregate and for particular items or categories of items supplied.
3 Consequently, SCE&G requested and the Commission issued Order No. 2008-
4 467, Order Granting Confidentiality and a Protective Order, approving
5 SCE&G's request for a declaration of confidentiality relating to certain
6 information contained in the confidential versions of Exhibit F, Chart A, in the
7 introduction to Exhibit I, and Exhibit I, Chart A that are attached to the
8 Combined Application. The public versions of these Exhibits are incorporated
9 into my testimony as **Exhibit F (Public)** and **Exhibit I (Public)**. In addition,
10 the confidential versions of these Exhibits are incorporated into my testimony
11 as **Exhibit F (Confidential)** and **Exhibit I (Confidential)**.

12
13 **Q. WHAT STEPS HAS SCE&G TAKEN TO MAINTAIN THIS**
14 **INFORMATION AS CONFIDENTIAL WHILE PROVIDING USEFUL**
15 **INFORMATION TO THE PUBLIC?**

16 A. SCE&G filed Chart A to Exhibit F of the Combined Application, which
17 is included in my testimony as Chart A to **Exhibit F (Public)**, Page 3 of 3, and
18 as Chart A to **Exhibit F (Confidential)**, Page 3 of 3, in both a public and a
19 confidential version. Although both versions show the total anticipated costs of
20 the units, the public version omits the details of EPC Costs, Owners' Costs, and
21 contingencies and escalations. The differences between the public and
22 confidential versions are explained more fully in Part 2 of **Exhibit F (Public)**,

1 Page 1 of 3 through 2 of 3, and in Part 2 of **Exhibit F (Confidential)**, Page 1
2 of 3 through 2 of 3. Additionally, SCE&G filed Exhibit I to the Combined
3 Application, which relates to the calculation of the inflation indices and
4 contingency factors, in both a public and confidential version. The public
5 version of Exhibit I is attached to my testimony as **Exhibit I (Public)** and the
6 confidential version attached as **Exhibit I (Confidential)**. As is the case with
7 respect to **Exhibit F (Public)**, **Exhibit I (Public)** omits certain details under
8 the EPC Contract.

9
10 **Q. WILL SCE&G MAKE AVAILABLE THE CONFIDENTIAL VERSIONS**
11 **OF EXHIBIT F, CHART A AND EXHIBIT I TO PARTIES WHO SIGN**
12 **AN APPROPRIATE CONFIDENTIALITY AGREEMENT?**

13 A. Yes.

14
15 **Q. HOW HAS SCE&G VERIFIED THE INFORMATION CONTAINED IN**
16 **THESE SCHEDULES?**

17 A. My staff and I carefully reviewed and verified the information to
18 determine the accuracy of the calculations. In addition, the information has
19 been prepared and reviewed by SCE&G personnel who are known to me to be
20 experts in the pertinent subject matters. Based on these reviews, I am confident
21 that the information set forth in the Combined Application reasonably reflects

1 the best estimate of the expected costs to construct and place into service Units
2 2 and 3.

3

4 **Q. DOES THE SCHEDULE OF ANTICIPATED COMPONENTS OF**
5 **CAPITAL COSTS IN EXHIBIT F (PUBLIC) REPRESENT ONLY**
6 **SCE&G'S SHARE OF THE COSTS OF THE PROJECT?**

7 A. Yes. Although the total cost of this project (less transmission project
8 costs and Allowance for Funds Used During Construction ("AFUDC")) is
9 being funded 55% by SCE&G and 45% by Santee-Cooper, Chart A of **Exhibit**
10 **F (Public)**, Page 3 of 3, represents only the costs for which SCE&G will be
11 responsible.

12

13 **Q. OVER WHAT PERIOD DOES SCE&G PROJECT THAT THESE**
14 **COSTS WILL BE INCURRED?**

15 A. The expected project cash flow based on the capital costs begins in the
16 year 2005 and continues through completion of Units 2 and 3.

17

18 **Q. WHAT IS THE TOTAL AMOUNT OF CAPITAL COSTS PROJECTED**
19 **BY SCE&G?**

20 A. The total projected amount is \$6,313,376,000, which is identified in
21 Chart A of **Exhibit F (Public)**, Page 3 of 3, as Gross Construction Costs.

22

1 **Q. IS THIS AMOUNT BROKEN OUT BY YEAR?**

2 A. Yes. Chart A of **Exhibit F (Public)**, Page 3 of 3, reflects the cash flow
3 required to fund the project capital costs for each year from 2007 until 2018.
4 The amount reflected for the year 2007 includes all project costs from the
5 commencement of the project through the end of 2007.

6

7 **Q. WHAT ARE THE ANTICIPATED COMPONENTS OF CAPITAL**
8 **COSTS THAT SCE&G EXPECTS TO INCUR?**

9 A. Consistent with the definition of the term “capital costs” or “plant
10 capital costs” in the Base Load Review Act, the separate components of the
11 capital costs set forth in Chart A of **Exhibit F (Public)**, Page 3 of 3, include the
12 plant costs, which are the costs of constructing Units 2 and 3; the transmission
13 project costs, which are the costs necessary to connect Units 2 and 3 to
14 SCE&G’s transmission grid; and AFUDC Costs, which is an amount
15 representing the capitalized interest incurred during the construction of the
16 plant and transmission facilities, calculated in accordance with regulatory
17 accounting principles and provisions of the Base Load Review Act. Chart A of
18 **Exhibit F (Public)**, Page 3 of 3, also reflects the anticipated schedule for
19 incurring these capital costs by breaking out the cash flow for each of these
20 components of capital costs for each year from the commencement of the
21 project through the year 2018.

22

1 **Q. DID SCE&G CALCULATE THE PLANT COSTS, TRANSMISSION**
2 **PROJECT COSTS, AND AFUDC COSTS SET FORTH IN EXHIBIT F**
3 **(PUBLIC) IN ACCORDANCE WITH GENERALLY ACCEPTED**
4 **REGULATORY AND FINANCIAL ACCOUNTING PRINCIPLES?**

5 A. Yes. SCE&G calculated the plant costs, transmission project costs, and
6 AFUDC costs set forth in Chart A of **Exhibit F (Public)**, Page 3 of 3, in
7 accordance with generally accepted regulatory and financial accounting
8 principles.

9

10 **Q. LET'S TALK ABOUT EACH OF THESE COMPONENTS OF**
11 **CAPITAL COSTS. WHAT IS THE TOTAL PROJECTED AMOUNT OF**
12 **CASH FLOW SOLELY FOR CONSTRUCTING UNITS 2 AND 3,**
13 **EXCLUDING TRANSMISSION PROJECT COSTS AND AFUDC?**

14 A. The total projected amount of cash flow solely for constructing Units 2
15 and 3, excluding transmission project costs and AFUDC costs, is
16 \$5,411,067,000.

17

18 **Q. DOES THE AMOUNT FOR CONSTRUCTING UNITS 2 AND 3,**
19 **EXCLUDING TRANSMISSION PROJECT COSTS AND AFUDC,**
20 **INCLUDE AN ADJUSTMENT FOR INFLATION?**

21 A. Yes. Although the line item amount entitled Total Unescalated Plant
22 Costs is not shown on Chart A of **Exhibit F (Public)**, Page 3 of 3, it is shown

on Chart A of **Exhibit F (Confidential)**, Page 3 of 3, and has been provided in 2007 dollars. There also is a line item for Contingencies, which is provided in Chart A of **Exhibit F (Confidential)**, Page 3 of 3, in 2007 dollars. To reflect the estimated future impact that inflation will have on these amounts, however, SCE&G has calculated inflation or escalation adjustments for these costs that are set forth on Chart A of **Exhibit F (Confidential)**, Page 3 of 3, in two line items, one identified as “Project Cost Escalation” and the other identified as “Contingency Escalation.” The categories reflect amounts that are expected to be paid over and above the unescalated project cost and contingency amounts as stated in 2007 dollars due to the impact of inflation. Again, the amounts projected for these elements of the project costs are not reflected in the public version of Chart A, although the total expected cost to construct Units 2 and 3 of \$5,411,067,000—including amounts determined for contingencies and escalation but excluding transmission project costs and AFUDC—is reflected on the public version of Chart A. The projected amounts for these elements of project cost are, however, included in the confidential version of Chart A, attached to **Exhibit F (Confidential)**, Page 3 of 3.

Q. WHY IS AN AMOUNT INCLUDED FOR CONTINGENCIES?

A. Contingencies are included to allow for items, conditions, or events the timing and nature of which is uncertain but which may occur and, thus, may result in additional costs to complete the project.

1 **Q. DOES EXHIBIT F (CONFIDENTIAL) SPECIFICALLY IDENTIFY**
2 **THE TOTAL PROJECTED AMOUNT OF UNESCALATED PROJECT**
3 **COSTS, WHICH EXCLUDES AMOUNTS FOR ESCALATION AND**
4 **CONTINGENCIES?**

5 A. Yes. The total projected amount of Unescalated Project Costs is
6 specifically set forth in **Exhibit F (Confidential)**, Chart A, Page 3 of 3. The
7 amount also is broken out by year in that same Exhibit.

8
9 **Q. WHAT ARE THE CATEGORIES IDENTIFIED ON CHART A OF**
10 **EXHIBIT F (PUBLIC) WITH REGARD TO THE PLANT COSTS**
11 **INCURRED IN CONSTRUCTING UNITS 2 AND 3 AND EXCLUDING**
12 **TRANSMISSION PROJECT COSTS AND AFUDC?**

13 A. As set forth on the left side of Chart A of **Exhibit F (Public)**, Page 3 of
14 3, and explained more fully in **Exhibit I (Public)**, Pages 1 of 8 through 3 of 8,
15 these categories are Fixed with No Adjustment; Firm with Fixed Adjustment
16 A; Firm with Fixed Adjustment B; Firm with Indexed Escalation; Actual Craft
17 Wages; Non-Labor Costs; Time & Materials; and Owners Costs Target
18 Estimates. I would like to point out that, as filed, the first line item on Chart A
19 of **Exhibit F (Public)**, Page 3 of 3, and of **Exhibit F (Confidential)**, Page 3 of
20 3, is identified as Fixed with Adjustment and, thus, erroneously omits the word
21 “No” from the description. This line item actually refers to the Fixed with No
22 Adjustment category.

1 **Q. ARE THE TOTAL AMOUNTS REFLECTED FOR EACH OF THESE**
2 **CATEGORIES IN EXHIBIT F (CONFIDENTIAL)?**

3 A. Yes. The total projected amounts for each of these categories is
4 specifically set forth and broken out by year in **Exhibit F (Confidential)**, Chart
5 A, Page 3 of 3.

6
7 **Q. ALTHOUGH NOT IN THE PUBLIC VERSION, ARE THE TOTAL**
8 **PROJECTED AMOUNTS FOR ESCALATION AND CONTINGENCY**
9 **SET FORTH IN EXHIBIT F (CONFIDENTIAL)?**

10 A. Yes. The total projected amounts for project cost escalation;
11 contingency; and contingency escalation that are identified only by category in
12 Chart A of **Exhibit F (Public)**, Page 3 of 3, are set forth in and are broken out
13 by year in Chart A of **Exhibit F (Confidential)**, Page 3 of 3.

14
15 **Q. HOW ARE THE ESCALATION AND CONTINGENCY AMOUNTS**
16 **CALCULATED?**

17 A. As shown on Chart A of **Exhibit F (Public)**, there are eight cost
18 categories within the plant cost component. These categories are defined by
19 risk profiles for each category. Seven of these categories are defined in the
20 EPC Contract, four of which involve costs that are fixed or fixed with
21 escalation and three of which are variable based on the actual cost incurred.
22 The eighth category pertains to Owners' Costs, or costs that SCE&G will incur

1 independent of the EPC Contract. The definitions for each of these categories
2 are determined either by the terms of the contract or by sound engineering and
3 planning assumptions provided by Company Witness Stephen A. Byrne and his
4 staff. Project cash flow is assigned to each risk profile based on common risk
5 characteristics and escalations and contingencies are applied to generate future
6 cash flow needs for use in regulatory and planning schedules. The contingency
7 amount also is escalated to account for inflation, as reflected in a separate line
8 item in Chart A of **Exhibit F (Public)**, Page 3 of 3.

9
10 **Q. IS THERE A CHART SUMMARIZING THE ESCALATION INDICES**
11 **AND ASSUMPTIONS AND THE ASSIGNED CONTINGENCY**
12 **FACTOR PERTAINING TO EACH OF THESE CATEGORIES?**

13 A. Yes. Chart A to **Exhibit I (Public)**, Page 4 of 8, provides this
14 information. The confidential version of Exhibit I to the Combined
15 Application, attached as **Exhibit I (Confidential)**, Page 4 of 8, contains more
16 detail than does the public version, but both generally explain the escalation
17 and contingency assumptions.

18
19 **Q. WHAT ARE THE DIFFERENCES BETWEEN EXHIBIT I (PUBLIC)**
20 **AND EXHIBIT I (CONFIDENTIAL)?**

21 A. The differences between **Exhibit I (Public)** and **Exhibit I**
22 **(Confidential)** are explained more fully in the public version of **Exhibit I**

1 (Public), Page 3 of 8. To summarize the differences, **Exhibit I (Public)** does
2 not contain the following information that is set forth in **Exhibit I**
3 **(Confidential)**:

- 4 • the percentage of the costs under the EPC Contract that fall
5 within the Fixed or Firm Pricing (“Fixed/Firm Pricing”) category
6 and the additional percentage of cost that Westinghouse/Stone &
7 Webster has agreed to offer for conversion to Fixed/Firm Pricing;
- 8 • the specific inflation factors that the EPC Contract has
9 established for the two Firm with Fixed Adjustment Categories;
10 and
- 11 • the specific items of equipment or cost included in the four
12 Fixed/Firm Pricing categories of cost.

13
14 **Q. DOES EXHIBIT I (CONFIDENTIAL) IDENTIFY THE ACTUAL**
15 **PERCENTAGE OF COSTS UNDER THE EPC CONTRACT THAT**
16 **FALL WITHIN THE FIXED/FIRM PRICING CATEGORY?**

17 A. Yes. **Exhibit I (Confidential)**, Page 1 of 8, identifies the percentage of
18 the total EPC Contract cost that is subject to Fixed/Firm Pricing based on the
19 current projections of total contract costs. Fixed/Firm Pricing is pricing that is
20 subject to no inflation factor, a fixed inflation factor, or an inflation factor tied
21 to a public inflation index. **Exhibit I (Confidential)**, Page 1 of 8, also
22 identifies the additional percentage of the current cost of the EPC Contract that

1 may be converted to Fixed/Firm Pricing in the future upon acceptance by
2 SCE&G of offers of Fixed/Firm Pricing that Westinghouse/Stone & Webster
3 has agreed to provide for designated aspects of the work.
4

5 **Q. PLEASE BRIEFLY EXPLAIN HOW THE ESCALATION AND**
6 **CONTINGENCY AMOUNTS ARE CALCULATED FOR EACH OF**
7 **THE CATEGORIES OF COSTS FOR CONSTRUCTING UNITS 2 AND**
8 **3.**

9 A. I will start with plant costs classified as Fixed with No Adjustment,
10 which are costs that are fixed in the EPC Contract and, thus, are not adjusted
11 for inflation. These costs represent various plant components as specified in the
12 EPC Contract. Because these amounts are fixed in the EPC Contract, they are
13 considered to have a relatively low contingency risk that is principally related
14 to change orders. The contingency has been calculated at 5% of the cost for this
15 category.
16

17 **Q. WHAT ABOUT COSTS CLASSIFIED AS FIRM WITH FIXED**
18 **ADJUSTMENT A AND FIRM WITH FIXED ADJUSTMENT B?**

19 A. Firm with Fixed Adjustment A represents other plant components
20 specified in the EPC Contract. Firm with Fixed Adjustment B represents
21 specific Westinghouse charges. These costs are escalated based on the
22 escalation percentage specified in the EPC Contract. The difference between

1 these two categories regarding an inflation adjustment is that Firm with Fixed
2 Adjustment B requires in addition to the escalation percentage an increase
3 designated as a nuclear industry administration adjustment to compensate
4 Westinghouse for undertaking the project. The actual escalation percentages
5 assigned to each of these risk categories are set forth in **Exhibit I**
6 **(Confidential)**, Page 2 of 4. These costs also are considered to have a
7 relatively low contingency risk that principally is related to change orders
8 because the costs and the escalation and nuclear industry administration
9 adjustments are specified in the EPC Contract. The contingency has been
10 calculated at 5% of the cost for this category.

11
12 **Q. PLEASE EXPLAIN THE COSTS CLASSIFIED AS FIRM WITH**
13 **INDEXED ESCALATION.**

14 A. These costs represent all equipment not included in the other categories
15 and other costs. These costs are escalated using the Handy-Whitman All Steam
16 Generation Plant Index, South Atlantic Region. These costs also are specified
17 in the EPC contract and, thus, are considered to have a relatively low
18 contingency risk of 5% of the cost for this category.

19
20 **Q. WHAT SPECIFIC ITEMS OF EQUIPMENT OR COST ARE**
21 **INCLUDED IN THE CATEGORIES OF FIXED WITH NO**
22 **ADJUSTMENT; FIRM WITH FIXED ADJUSTMENT A; FIRM WITH**

1 **FIXED ADJUSTMENT B; AND FIRM WITH INDEXED**
2 **ESCALATION?**

3 A. The specific items of equipment or cost comprising the categories of
4 Fixed with No Adjustment; Firm with Fixed Adjustment A; Firm with Fixed
5 Adjustment B; and Firm with Indexed Escalation are identified in **Exhibit I**
6 **(Confidential)**, Chart A, Page 4 of 8, under the heading “Cost Make-up.”

7
8 **Q. WHAT IS THE HANDY-WHITMAN INDEX?**

9 A. The Handy-Whitman index reflects the level of costs for different types
10 of utility construction. This index is well-recognized and commonly used in the
11 utility industry to estimate the cost of constructing facilities. SCE&G has used
12 this index for decades and has determined that the information is reliable and
13 useful for estimating the cost of construction of utility facilities. Depending
14 upon the category of costs, SCE&G is using the Handy-Whitman All Steam
15 Generation Plant Index, the All Steam & Nuclear Generation Plant Index, and
16 the All Transmission Plant Index to determine the escalation amount. The
17 index also is determined by region, and SCE&G is using the South Atlantic
18 Region indices for purposes of calculating the escalation adjustment in this
19 proceeding. In my opinion, these are the appropriate indices to use for
20 estimating future escalations in prices for this project.

1 **Q. HOW DID SCE&G APPLY INFLATION DATA IN CALCULATING**
2 **THE ESCALATION AMOUNTS SET FORTH IN THE SCHEDULE OF**
3 **CAPITAL COSTS?**

4 A. For the 12-month period following the date the Combined Application
5 was filed, SCE&G used inflation data from the most recent 12-month period
6 preceding the date of filing for which data were available. For periods more
7 than 12 months following the date the Combined Application was filed,
8 SCE&G used the most current five-year average of the applicable inflation
9 index for which data were available. Information from the applicable Handy-
10 Whitman indices since 1997 is attached as **Exhibit I (Public)**, Chart B, Pages 5
11 of 8 through 7 of 8. I believe this is an appropriate methodology to use for
12 estimating escalation in prices in future periods.

13
14 **Q. PLEASE EXPLAIN THE ESCALATION AND CONTINGENCY**
15 **CALCULATION FOR COSTS IDENTIFIED AS ACTUAL CRAFT**
16 **WAGES.**

17 A. These costs represent all site craft labor and are escalated for planning
18 purposes using the Handy-Whitman All Steam & Nuclear Generation Plant
19 Index, South Atlantic Region. The most recent one-year index change is used
20 to escalate costs for 2008 and the most recent five-year average of this index is
21 used to escalate costs for 2009 and beyond. Information from this index since
22 1997 is attached as **Exhibit I (Public)**, Chart B, Page 6 of 8. These costs are

1 considered to have a higher than average contingency risk, estimated as 20% of
2 the cost of this category.

3
4 **Q. WHAT ABOUT NON-LABOR TARGET COSTS?**

5 A. These costs include construction materials, consumables, and
6 furnish-and-erect subcontractors' costs and also are escalated for planning
7 purposes using the Handy-Whitman All Steam & Nuclear Generation Plant
8 Index, South Atlantic Region. The most recent one-year index change is used
9 to escalate costs for 2008 and the most recent five-year average of this index is
10 used to escalate costs for 2009 and beyond. Information from this index since
11 1997 is attached as **Exhibit I (Public)**, Chart B, Page 6 of 8. These costs are
12 estimated to have a moderately high contingency risk, estimated as 15% of the
13 cost of this category.

14
15 **Q. WHAT ARE THE COSTS SHOWN FOR THE TIME AND MATERIALS**
16 **CATEGORY?**

17 A. These costs represent plant startup costs and other permitting and
18 licensing support costs. As is the case with the previous two categories, these
19 costs are escalated for planning purposes using the Handy-Whitman All Steam
20 & Nuclear Generation Plant Index, South Atlantic Region. The most recent
21 one-year index change is used to escalate costs for 2008 and the most recent
22 five-year average of this index is used to escalate costs for 2009 and beyond.

1 Information from this index since 1997 is attached as **Exhibit I (Public)**, Chart
2 B, Page 6 of 8. These costs are estimated to have a moderately high
3 contingency risk, estimated as 15% of the cost of this category.
4

5 **Q. PLEASE EXPLAIN THE OWNERS' COSTS CATEGORY, WHICH IS**
6 **THE FINAL CATEGORY OF PLANT COSTS.**

7 A. These costs include all equipment, labor, materials, insurance, overhead,
8 and similar costs not covered by the EPC Contract. These costs are escalated
9 for planning purposes using the Gross Domestic Product Chained Price Index,
10 which is a commonly-used general escalation index published by the U.S.
11 Government. In my opinion, this is an appropriate index to use for these cost
12 escalations. The most recent one-year factor in this index is used to escalate
13 costs for 2008 and the most recent five-year average of this index is used to
14 escalate costs for 2009 and beyond. Information from this index since 1998 is
15 attached as **Exhibit I (Public)**, Chart B, page 8 of 8. These costs are estimated
16 to have a moderately high contingency risk, estimated as 15% of the cost of
17 this category.
18

19 **Q. DO THESE CATEGORIES REFLECT ALL OF THE PLANT COST**
20 **CATEGORIES IDENTIFIED BY SCE&G, EXCLUDING**
21 **TRANSMISSION PROJECT COSTS AND AFUDC, AS SET FORTH ON**
22 **CHART A OF EXHIBIT F (PUBLIC)?**

1 A. Yes.

2

3 **Q. WHAT IS THE TOTAL ESTIMATED COST FOR TRANSMISSION**
4 **PROJECTS, WHICH IS THE NEXT COMPONENT OF CAPITAL**
5 **COSTS REFLECTED ON THE SCHEDULE OF ANTICIPATED**
6 **COMPONENTS OF CAPITAL COSTS?**

7 A. The total is \$638,020,000, which is broken out by year on **Exhibit F**
8 **(Public)**, Chart A, Page 3 of 3. This total consists of the costs to construct the
9 transmission connections for Units 2 and 3 as stated in 2007 dollars, plus
10 additional amounts to account for contingencies and escalation.

11

12 **Q. HOW IS THE CONTINGENCY AMOUNT FOR TRANSMISSION**
13 **COSTS DETERMINED?**

14 A. The contingency risk for this cash flow amount is expected to be
15 moderately high, so the contingency is estimated to be 15% of the cost of this
16 category.

17

18 **Q. AND HOW IS THE ESCALATION AMOUNT FOR TRANSMISSION**
19 **COSTS DETERMINED?**

20 A. The escalation cost is calculated for planning purposes using the Handy-
21 Whitman Transmission Plant Index, South Atlantic Region. The most recent
22 one-year index change is used to escalate costs for 2008 and the most recent

1 five-year average of this index is used to escalate costs for 2009 and beyond.
2 Information from this index since 1997 is attached as **Exhibit I (Public)**, Chart
3 B, Page 7 of 8.
4

5 **Q. AND DO THE TOTALS FROM THE TWO COMPONENTS**
6 **IDENTIFIED AS PLANT COST AND TRANSMISSION PROJECTS**
7 **WHEN ADDED TOGETHER EQUAL THE TOTAL PROJECT CASH**
8 **FLOW OF \$6,049,087,000 SHOWN ON CHART A OF EXHIBIT F**
9 **(PUBLIC)?**

10 A. Yes. There also is a line item showing how the total project cash flow
11 will be incurred in each year beginning with the commencement of the project
12 and continuing through 2018.
13

14 **Q. PLEASE EXPLAIN THE FINAL COMPONENT OF CAPITAL COSTS,**
15 **THE AFUDC.**

16 A. As previously stated, this amount reflects the Allowance for Funds Used
17 During Construction of a plant as calculated using regulatory accounting
18 principles. The amount shown on Chart A of **Exhibit F (Public)**, Page 3 of 3,
19 was calculated using SCE&G's current AFUDC rate. This rate was calculated
20 based on the methodology established by the Federal Energy Regulatory
21 Commission and that is required pursuant to the Uniform System of Accounts
22 as adopted under regulations issued by the Commission. This rate varies each

1 year depending upon changes in market interest rates, SCE&G's embedded
2 cost of capital, capitalization ratios, CWIP, and SCE&G's short-term
3 outstanding debt.
4

5 **Q. WHAT IS THE TOTAL AMOUNT SHOWN ON CHART A OF**
6 **EXHIBIT F (PUBLIC) FOR AFUDC?**

7 A. The total is \$264,289,000, which is broken out by year on **Exhibit F**
8 **(Public)**, Chart A, Page 3 of 3, over the period beginning with the
9 commencement of the project through substantial completion of the EPC
10 Contract.
11

12 **Q. AND DOES THE SUM OF THE AMOUNTS SHOWN FOR PLANT**
13 **COST CATEGORIES, TRANSMISSION PROJECTS, AND AFUDC**
14 **EQUAL THE TOTAL GROSS CONSTRUCTION AMOUNT OF**
15 **\$6,313,376,000?**

16 A. Yes.
17

18 **Q. DOES CHART A OF EXHIBIT F (PUBLIC) CONTAIN**
19 **INFORMATION REGARDING CWIP?**

20 A. Yes, the last line item on Chart A of **Exhibit F (Public)**, Page 3 of 3,
21 provides the projected total cumulative CWIP for each year from the year
22 2007, which includes all project costs incurred as of that year, through 2018,

1 with the cumulative CWIP for the year 2018 equaling the total Gross
2 Construction Cost.

3

4 **Q. COULD THE INFORMATION SET FORTH IN EXHIBIT F (PUBLIC)**
5 **AND EXHIBIT F (CONFIDENTIAL) CHANGE?**

6 A. Yes, this information most likely will change depending upon the actual
7 amounts expended during construction of the plant, the actual progress made
8 during each year, and changes in the actual indices applied to the total project
9 cost.

10

11 **Q. DOES THE COMBINED APPLICATION INCLUDE INFORMATION**
12 **RELATED TO SCE&G'S REVENUE REQUIREMENTS FOR EACH**
13 **YEAR DURING THE CONSTRUCTION PERIOD RELATED TO THE**
14 **EXPECTED CAPITAL COSTS?**

15 A. Yes. This information is attached as Exhibit M to the Combined
16 Application, and as **Exhibit M** to my testimony.

17

18 **Q. HOW ARE THE REVENUE REQUIREMENTS DETERMINED FOR**
19 **EACH YEAR?**

20 A. The revenue requirements are determined by taking the projected
21 outstanding CWIP amount for each year as of June 30 and multiplying that by
22 SCE&G's weighted average cost of capital. **Exhibit M**, Chart A, Page 3 of 4,

breaks down the revenue requirements by nuclear construction and transmission projects, and also shows the projected incremental revenue requirements for each year based on the CWIP for that year. In addition, Chart A of **Exhibit M**, Page 3 of 4, reflects the cumulative revenue requirements for each year.

Q. HOW IS THE WEIGHTED AVERAGE COST OF CAPITAL PERCENTAGE DETERMINED?

A. As set forth in **Exhibit L**, the weighted average cost of capital percentage is determined by calculating the ratio of long-term debt, preferred stock, and common equity outstanding for SCE&G as of December 31, 2007. In addition, the amount reflected for long-term debt on **Exhibit L** includes actual and planned debt issuances that were scheduled for 2008 as of the date the Combined Application was filed. We then determined—as reflected in the column entitled “Ratio”—the ratio that each component bears to SCE&G’s regulated utility’s capital structure. The ratio then was multiplied by the embedded costs applicable to each component to determine the weighted average cost of capital, which totaled 8.76%.

Q. HOW WERE THE EMBEDDED COSTS IN EXHIBIT L DETERMINED?

1 A. For long-term debt and preferred stock, the embedded costs represent
2 the calculated costs to SCE&G for issuing the debt or preferred stock. As
3 Company Witness Jimmy E. Addison has testified, for common equity, the
4 embedded cost of 11% incorporates the rate of return on equity, or ROE, that
5 the Commission approved in December 2007. SCE&G used this amount
6 because the Base Load Review Act authorizes use of the ROE approved in our
7 most recent general rate proceeding if the order in that proceeding was issued
8 no more than five years before the Combined Application was filed.

9

10 **Q. DID SCE&G THEN USE THE WEIGHTED AVERAGE COST OF**
11 **CAPITAL OF 8.76% TO DETERMINE ITS REVENUE**
12 **REQUIREMENTS?**

13 A. No. Because the weighted average cost of capital of 8.76% is net of tax,
14 it was necessary to adjust that result for the effect of income taxes.

15

16 **Q. WHAT IS THE WEIGHTED AVERAGE COST OF CAPITAL WHEN**
17 **ADJUSTED FOR THE EFFECT OF INCOME TAXES?**

18 A. As set forth in **Exhibit L**, the weighted average cost of capital when
19 adjusted for the impact of income taxes is 12.51%.

20

21 **Q. HAVE THERE BEEN ANY CHANGES FROM THE AMOUNTS**
22 **PROJECTED FOR THE 2008 DEBT ISSUANCES?**

1 A. Yes. The June 2008 issuance of \$100,000,000 in First Mortgage Bonds
2 projected in **Exhibit L** occurred as scheduled, but the amount issued actually
3 was \$110,000,000. Also, although it will not impact the cost of capital
4 percentage, the projected August 2008 debt issuance of \$40,000,000 in
5 Pollution Control Bonds set forth in **Exhibit L** probably will not occur until
6 October 2008. The resulting changes will be updated through the testimony of
7 Office of Regulatory Staff witnesses based on the results of their audit.

8

9 **Q. UNDER THE ANALYSIS OF THE YEAR-BY-YEAR REVENUE**
10 **REQUIREMENTS AND PROJECTED LEVEL OF INVESTMENT, ON**
11 **WHAT DATE DOES SCE&G PROPOSE TO MAKE EFFECTIVE THE**
12 **RATES REFLECTING THE INCREASED REVENUE**
13 **REQUIREMENTS?**

14 A. As Company Witness Kenneth R. Jackson will explain more fully in his
15 testimony regarding the revenue and rate determinations, SCE&G proposes in
16 **Exhibit M** that revised rates initially be made effective 30 days after the
17 issuance of the Commission order in this proceeding based on CWIP as of June
18 30, 2008. The Company has the right to seek annual adjustments thereafter.

19

20 **Q. PLEASE BRIEFLY EXPLAIN THE ANALYSIS SET FORTH IN**
21 **CHART A OF EXHIBIT M FOR THE YEAR-BY-YEAR REVENUE**
22 **REQUIREMENTS AND PROJECTED LEVEL OF INVESTMENT.**

1 A. Using the year 2010 as an example in Chart A of **Exhibit M**, Page 3 of
2 4, the total CWIP for both Nuclear Construction and Transmission Projects
3 incurred between June 30, 2009 and June 30, 2010 is estimated to be
4 \$524,430,000. The incremental revenue required to fund this amount is
5 estimated to be \$65,590,000, which is the amount of CWIP in Rates for 2010
6 multiplied by 12.51%, which is the weighted average cost of capital adjusted
7 for the impact of income taxes. The cumulative incremental revenue required
8 when rates become effective on October 30, 2010 is \$122,698,000, which is the
9 incremental revenue requirement of \$65,590,000 for 2010 plus the cumulative
10 incremental revenue requirement as of 2009, or \$57,108,000. This process is
11 completed for each year. This information is only an example and the
12 calculations for each future period will be based upon the actual information
13 determined at that time.

14
15 **Q. DO THE AMOUNTS SHOWN FOR CWIP ON CHART A OF EXHIBIT**
16 **M AGREE WITH THE AMOUNTS SHOWN FOR CWIP ON CHART A**
17 **OF EXHIBIT F (PUBLIC)?**

18 A. No.

19
20 **Q. PLEASE EXPLAIN WHY THEY DO NOT AGREE.**

21 A. Chart A of **Exhibit M**, Page 3 of 4, reflects CWIP as of June 30 of each
22 year. In contrast, CWIP as shown on Chart A of **Exhibit F (Public)**, Page 3 of

1 3, is determined as of December 31 of each year. Thus, the CWIP amounts do
2 not agree because they are based on snapshots taken at different times during
3 the year. I would also point out that the total CWIP in rates of \$6,313,376,000
4 shown on Chart A of **Exhibit M**, Page 3 of 4, does agree to the total Gross
5 Construction cost shown on Chart A of **Exhibit F (Public)**, Page 3 of 3.

6
7 **Q. WHY DO THE TOTAL AMOUNTS SHOWN FOR NUCLEAR**
8 **CONSTRUCTION AND TRANSMISSION PROJECTS DIFFER**
9 **BETWEEN THESE TWO EXHIBITS?**

10 A. Because the amounts reflected on Chart A of **Exhibit M**, Page 3 of 4,
11 also include that component's share of AFUDC, whereas AFUDC is expressed
12 in aggregate as a separate line item on Chart A of **Exhibit F (Public)**, Page 3
13 of 3.

14
15 **Q. COULD THE INFORMATION SET FORTH IN CHART A OF**
16 **EXHIBIT M REGARDING THE YEAR-BY-YEAR REVENUE**
17 **REQUIREMENTS AND PROJECTED LEVEL OF INVESTMENT**
18 **CHANGE IN THE FUTURE?**

19 A. Yes. The analysis in Chart A of **Exhibit M**, Page 3 of 4, is based upon
20 the best information available at the time of filing the Combined Application.
21 These amounts will change based on the actual amount of CWIP during the
22 years at issue, the filing date of future rate proceedings, and other factors.

1 **Q. WHAT IS THE PURPOSE OF CHART B TO EXHIBIT M?**

2 A. The purpose of Chart B of **Exhibit M**, Page 4 of 4, is to demonstrate the
3 projected impact on rates of the increased revenue requirements set forth in
4 Chart A of **Exhibit M**, Page 3 of 4. It is important to remember that Chart B of
5 **Exhibit M**, Page 4 of 4, reflects only the estimated impact on rates attributable
6 solely to construction of Units 2 and 3.

7

8 **Q. COULD THE PROJECTIONS IN CHART B OF EXHIBIT M FOR THE**
9 **YEAR-BY-YEAR REVENUE REQUIREMENTS AND PROJECTED**
10 **LEVEL OF INVESTMENT CHANGE OVER FUTURE PERIODS?**

11 A. Yes. Although Chart B of **Exhibit M**, Page 4 of 4, is based upon the
12 best available information, the amounts could change based upon future rate
13 changes that may occur independent of constructing Units 2 and 3. Also, actual
14 rate impacts from the Units will vary based on the actual rates of growth in
15 customers and demand during the period, changes in SCE&G's cost of capital,
16 changes in the amount and timing of investment in the Units, changes in In-
17 Service Expenses, and other factors impacting rates.

18

19 **Q. ARE IN-SERVICE EXPENSES INCORPORATED INTO CHART B OF**
20 **EXHIBIT M AS PART OF THE CALCULATION OF REVENUE**
21 **REQUIREMENTS?**

1 A. Yes, this information is included in the amounts reflected in Chart B of
2 **Exhibit M**, Page 4 of 4. Specifically, the Incremental Revenue Requirement
3 projected for 2016 includes the Projected In-Service Expenses for Unit 2 for
4 the 12 months following its anticipated in-service date of April 1, 2016, and the
5 projected Incremental Revenue Requirement for 2019 includes the Projected
6 In-Service Expenses for Unit 3 for the 12 months following its anticipated in-
7 service date of January 1, 2019.

8

9 **Q. WHAT ARE THE PROJECTED IN-SERVICE EXPENSES**
10 **ASSOCIATED WITH EACH OF THE V.C. SUMMER UNITS FOR THE**
11 **12 MONTHS FOLLOWING COMMENCEMENT OF COMMERCIAL**
12 **OPERATION OF EACH OF THE UNITS?**

13 A. This information is set forth in **Exhibit O**. The In-Service Expenses for
14 the 12 months after each unit is placed in service are estimated to be
15 \$223,336,000 for Unit 2 and \$216,342,000 for Unit 3. I believe these amounts
16 are a reasonable estimate of the expenses that will result from commencing
17 commercial operation of Units 2 and 3.

18

19 **Q. WHAT ARE THE COMPONENTS OF THE CALCULATED IN-**
20 **SERVICE EXPENSE AMOUNTS?**

21 A. As reflected in **Exhibit O**, the estimates for In-Service Expenses include
22 Fixed Operation and Maintenance Expenses that will not vary with the

operation of the plant; Variable Operation and Maintenance Expenses that will vary with the operation of the plant; Decommissioning Expenses, which is the amount needed to fund a trust that SCE&G plans to use to provide reasonable assurance of the availability of its share of funds to decommission the facility; Fuel Costs, which is the cost of nuclear fuel for the 12-month period; Depreciation, which is calculated for the nuclear units using a straight-line basis assuming a 60-year life for each units and using approved rates for transmission facilities; Taxes Other than Income, which includes property taxes, gross receipts taxes, and taxes to support the Commission; and the Return on Materials, Supplies, and Working Capital, which were estimated by applying SCE&G's weighted average cost of capital to projected balances for fuel, inventories, materials and supplies, and working capital associated with each of the new nuclear units.

Q. DID SCE&G CALCULATE THE IN-SERVICE EXPENSES IN ACCORDANCE WITH GENERALLY ACCEPTED PRINCIPLES OF REGULATORY AND FINANCIAL ACCOUNTING?

A. Yes.

Q. DOES SCE&G ANTICIPATE ANY ATYPICAL OR ABNORMAL EXPENSE LEVELS DURING THE IN-SERVICE PERIODS FOR

1 **UNITS 2 AND 3 THAT MUST BE NORMALIZED PURSUANT TO THE**
2 **BASE LOAD REVIEW ACT?**

3 A. No. The anticipated In-Service Expenses identified in **Exhibit O** reflect
4 typical and normal expense levels that reasonably would be expected to be
5 incurred during the 12-month period after placing a new nuclear power reactor
6 into service.

7
8 **Q. WHAT IS THE NUCLEAR FUEL COST ADJUSTMENT SHOWN ON**
9 **CHART B OF EXHIBIT M?**

10 A. This amount, which is reflected on Chart B of **Exhibit M**, Page 4 of 4,
11 reflects the cost savings that SCE&G expects to derive from replacing more
12 expensive forms of energy such as coal or natural gas with electricity from
13 nuclear energy.

14
15 **Q. WHAT IS REPRESENTED BY THE LINE ITEM ENTITLED**
16 **PRODUCTION TAX CREDITS APPLIED TO FUEL COSTS AS**
17 **SHOWN ON CHART B OF EXHIBIT M?**

18 A. This amount, which is represented on Chart B of **Exhibit M**, Page 4 of
19 4, reflects the benefit that SCE&G expects to derive from the advanced nuclear
20 power facility production credits (“Production Tax Credits”) to which it
21 expects that it will be entitled under the Energy Policy Act of 2005 (“Energy
22 Policy Act”), which added Section 45J to the Internal Revenue Code. These

1 provisions make available a total of \$125,000,000 annually in tax credits for up
2 to eight years for a nuclear power facility for which a utility has filed an
3 application with the United States Nuclear Regulatory Commission for a
4 Construction and Operating License (“COL”), on or before December 31,
5 2008; started construction of the facility before January 1, 2014; filed an
6 application for certification of the facility with the United States Department of
7 Energy on or before January 31, 2014; received certification of the facility
8 from DOE; and placed the facility into service before January 1, 2021. In
9 addition, the utility must file an application to receive an allocation of a share
10 of the Production Tax Credits with the Internal Revenue Service (“IRS”) on or
11 before January 31, 2014.

12
13 **Q. DOES SCE&G EXPECT AT THIS TIME THAT IT WILL MEET THE**
14 **REQUIREMENTS FOR RECEIVING AN ALLOCATION OF THESE**
15 **PRODUCTION TAX CREDITS?**

16 A. Yes. SCE&G already has filed its application for a COL for Units 2 and
17 3 and projects that it will begin construction of the nuclear units at the V.C.
18 Summer location by December 2013 and that it will place those units into
19 service well before January 1, 2021. SCE&G also expects that it will file the
20 required applications with the Department of Energy and the IRS on or before
21 January 31, 2014 and that both of these applications will be approved. SCE&G
22 therefore anticipates that it will be entitled to a share of the Production Tax

1 Credits authorized by the Energy Policy Act during each of the years 2016
2 through 2026. Because SCE&G intends at a future date to seek approval from
3 the Commission to pass along these tax credits to customers as an offset or
4 reduction of fuel cost expenses, Chart B to **Exhibit M**, Page 4 of 4, reflects the
5 benefit to customers of passing along the tax credits based on the assumption
6 that the Commission will approve this request. SCE&G believes it is
7 appropriate to reduce fuel costs to reflect this benefit because the primary
8 benefit to customers from using the nuclear units versus other forms of power
9 generation is the reduction in fuel costs. Furthermore, because of the year-to-
10 year variability of the amount of these credits, the use of the fuel clause seems
11 more appropriate. Thus, SCE&G believes this benefit should be passed along
12 to customers through a reduction of the fuel costs included in the determination
13 of rates.

14
15 **Q. HOW DID SCE&G DETERMINE THE AMOUNTS SHOWN ON THE**
16 **PRODUCTION TAX CREDIT LINE ITEM?**

17 A. The amount of Production Tax Credits reflected in Chart B of **Exhibit**
18 **M**, Page 4 of 4, is based upon the appropriate allocation of credits available
19 under the Energy Policy Act for each calendar year. This allocation depends
20 upon the capacity of the nuclear reactor placed in service in relation to the total
21 megawatts of nuclear-fueled capacity that is being placed into service during
22 the year at issue. The total available credit also is limited to 6,000 megawatts

1 for any of the years 2016 through 2026 at 1.8 cents per kilowatt hour, which
2 equates to a credit of \$18 per megawatt hour of production. If, however, the
3 reactor placed into service has less than 1,000 megawatts of capacity, the credit
4 for that reactor in any year further is limited to an amount equal to the ratio of
5 the reactor's total capacity to 1,000 megawatts multiplied by the maximum
6 available tax credits of \$125,000,000. These calculations must be performed
7 for each year that a reactor is eligible for credits, which is eight years, and will
8 differ from year to year depending upon the megawatt capacity of qualifying
9 reactors that are placed into service during each year or that become ineligible
10 to receive credits in each year due to expiration of the eight-year credit
11 window.

12
13 **Q. DO THE AMOUNTS SHOWN ON CHART B OF EXHIBIT M**
14 **REGARDING THE EXPECTED TAX CREDIT FOR EACH YEAR**
15 **EQUAL THE AMOUNT OF TAX CREDIT TO WHICH SCE&G**
16 **EXPECTED TO BE ENTITLED FOR THAT YEAR?**

17 A. No. Once the appropriate amount of the Production Tax Credits is
18 determined, that amount is "grossed up" to reflect the appropriate amount of
19 taxable income to be offset by application of the tax credit. In other words,
20 because the Production Tax Credit is a credit against the amount of tax
21 calculated based on an entity's total taxable income, the actual amount of
22 income protected by the credit and, thus, the revenue benefit of the tax credit

1 actually is greater than the credit. Chart B of **Exhibit M**, Page 4 of 4, reflects
2 these grossed-up amounts.

3
4 **Q. CAN YOU SUMMARIZE HOW SCE&G HAS CALCULATED THIS**
5 **INFORMATION WITH RESPECT TO UNITS 2 AND 3?**

6 A. Yes. This information is reflected on the Schedule of Gross and Net
7 Projected Production Tax Credits attached to my testimony as **Exhibit No. ____**
8 **(EEB-6)**. As reflected in this Exhibit, SCE&G expects to be entitled to a
9 Production Tax Credit of approximately \$76,813,000 for the year 2016 based
10 on the best available information at the time of the filing of the Combined
11 Application regarding the total new nuclear power plant capacity that will be
12 placed into service during that year by all utilities. This amount is determined
13 based upon the provisions of the Internal Revenue Code and pertinent guidance
14 from the IRS regarding computation of the credit. When grossed up, that
15 amount offsets approximately \$124,393,000 of taxable income as set forth on
16 **Exhibit No. ____ (EEB-6)** and this is the amount reflected in the Production
17 Tax Credits Line Item on Chart B of **Exhibit M**, Page 4 of 4, for the year 2016.
18 This same process is followed each year for Unit 2 for the years 2016 to 2023
19 and for Unit 3 for the years 2019 to 2026.

20
21 **Q. WILL THE LEVEL OF BENEFIT DERIVED FROM THE**
22 **PRODUCTION TAX CREDITS LIKELY CHANGE?**

1 A. Yes. Assumptions were made based on many factors, including the
2 number and capacity of reactors placed into service by other utilities; the date
3 those reactors will be placed into service; the dates on which Units 2 and 3 will
4 be placed into service; and other factors mentioned in Company Witness Kevin
5 B. Marsh's testimony.

6

7 **Q. WHY DOES THE AMOUNT OF THE PRODUCTION TAX CREDIT**
8 **AND THE CORRESPONDING GROSS INCOME CHANGE FOR THE**
9 **YEARS 2016 TO 2026?**

10 A. SCE&G expects that the proportion of the total Production Tax Credit
11 to which it is entitled will decline during the years 2017 through 2018 because
12 other utility companies will be placing nuclear reactors into service and, thus,
13 also will be entitled to a share of the total tax credits available. The total
14 amount of the credit will increase when Unit 3 is placed into service in 2019
15 and remain steady until the year 2023, then decrease in 2024 because the eight-
16 year window for Unit 2 expires after 2023. The amount of the credit then will
17 increase for the years 2025 and 2026 because Unit 3 will remain eligible for
18 credits through 2026, but the eight-year window will expire during those years
19 for many of the reactors placed into service prior to Unit 3. The corresponding
20 amounts of taxable income that will be offset by the credits also change in
21 accordance with this schedule.

22

1 **Q. WHAT IS THE TOTAL BENEFIT THAT SCE&G EXPECTS TO**
2 **RECEIVE FROM THE ADVANCED NUCLEAR POWER FACILITY**
3 **PRODUCTION TAX CREDITS?**

4 A. As shown on **Exhibit No. ____ (EEB-6)**, the total benefit to SCE&G in
5 future dollars is Production Tax Credits of approximately \$331,388,000 for
6 Unit 2 and approximately \$324,648,000 for Unit 3, for a grand total of
7 \$656,036,000 of tax credits. The tax credits attributable to Unit 2 offset
8 approximately \$536,659,000 of taxable income, and those attributable to Unit 3
9 offset approximately \$525,751,000 of taxable income, for a total income offset
10 of approximately \$1,062,410,000, the benefit of which SCE&G proposes to
11 pass along to customers in the form of offsets to its fuel cost expenses.
12

13 **Q. PLEASE SUMMARIZE YOUR TESTIMONY FOR THE**
14 **COMMISSION.**

15 A. As reflected in Exhibits F, I, L, M, and O to the Application and based
16 on the EPC Contract, SCE&G projects that it can construct two additional
17 nuclear power reactors at the existing V.C. Summer site and also construct the
18 necessary transmission line infrastructure for approximately \$6.3 billion. The
19 total incremental revenue required of approximately \$1.229 billion through
20 2019 leads to a projected average annual rate increase of 2.49% through the
21 year 2020. The revenue projections include recovery of the projected in-service
22 expenses of \$223 million (in 2016 dollars) for Unit 2 and \$216 million (in 2019

1 dollars) for Unit 3 for the 12-month period after each unit is placed in service.
2 Consistent with its proposal to keep the annual rate increases related to the
3 project as low as possible, SCE&G seeks to allocate—and the rate and revenue
4 projections include—expected benefits derived from available federal tax
5 credits to customers in the form of reductions in the fuel costs for each year.
6 SCE&G therefore respectfully requests that the Commission approve the
7 Application because two additional nuclear power reactors at the V.C. Summer
8 site will be used and useful for the safe and reliable production of electricity for
9 SCE&G’s customers and for the benefit of the infrastructure of South Carolina.

10

11 **Q. DOES THIS CONCLUDE YOUR PRE-FILED TESTIMONY?**

12 **A. Yes.**